

In the same fashion as Example 1, here, the IC and Cancer patient groups displayed elevated levels of NGF in their urine as compared to the Control patient group.

#### Example 3

##### Analyzing Urine for GDNF

This Example proceeded in exactly the same fashion as Example 1 with the exception that each urine sample was tested for the presence of GDNF using the "Emax"-brand GDNF ImmunoAssay System ELISA from Promega Corporation, following the manufacturer's instructions. (See Promega Technical Bulletin No. 221.)

The results are depicted in FIG. 4. Each patient within the individual control, IC, and bladder cancer groups is designated by a different symbol on the graph. Symbols have been duplicated in more than one patient groups; these duplicated symbols are unrelated.

In the same fashion as Examples 1 and 2, the IC and Cancer patient groups displayed elevated levels of GDNF in their urine as compared to the Control patient group.

#### Example 4

##### Analyzing Urine for Trypsin

In this Example, the double antibody-sandwich ELISA described in U.S. Pat. No. 5,594,116 was used. This ELISA uses capture antibodies which are avian-derived polyclonal trypsin-specific antibodies capable of capturing trypsin from solution and detect antibodies are monoclonal, murine-derived anti-trypsin antibodies. The same protocol described in the previous Examples was used to establish the standard curve and to analyze the test samples with the exception that the urine samples were not acid treated.

The results are depicted in FIG. 5. Each patient within the individual control, IC, and bladder cancer groups is designated by a different symbol on the graph. Symbols have been duplicated in more than one patient groups; these duplicated symbols are unrelated.

In the same fashion as the previous Examples, the IC and Cancer patient groups displayed elevated levels of trypsin in their urine as compared to the Control patient group.

It is understood that the method disclosed above is not limited to the particular reagents and steps illustrated and described, but embraces all equivalent forms thereof which are encompassed by the following claims.

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 40 What is claimed is:  
 1. A method of diagnosing or monitoring bladder cancer in a mammal comprising determining concentration of a urine-soluble protein selected from the group consisting of neurotrophin-3, glial cell line-derived neurotrophic factor, trypsin, and combinations thereof in urine from the mammal and from a control population of mammals with no history of bladder cancer; and then comparing the concentrations from the mammal with corresponding concentrations from the control population, wherein elevated levels of neurotrophin-3, glial cell line-derived neurotrophic factor, or trypsin in the mammal as compared to the control population is indicative of bladder cancer in the mammal.  
 45 2. The method of claim 1, wherein the concentration of the urine-soluble protein is analyzed using an enzyme-linked immunosorbent assay.  
 3. The method of claim 2, wherein the concentration of neurotrophin-3 is analyzed.  
 4. The method of claim 2, wherein the concentration of glial cell line-derived neurotrophic factor is analyzed.  
 50 5. The method of claim 2, wherein the concentration of trypsin is analyzed.  
 6. The method of claim 2, wherein the concentration of neurotrophin-3, glial cell line-derived neurotrophic factor, or trypsin is analyzed using corresponding double antibody-sandwich enzyme-linked immunosorbent assays specific for neurotrophin-3, glial cell line-derived neurotrophic factor, or trypsin.